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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/382,088	08/24/99	HOPE E	A-67031-1/RF

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EXAMINER	
DECLOUX, A	
ART UNIT	**PAPER NUMBER**
1644	16

DATE MAILED: 07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/382,088	Hope et al.
Examiner	**Art Unit**
DeCloux, Amy	1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Feb 28, 2001

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-42 is/are pending in the applica

4a) Of the above, claim(s) 16-42 is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-15 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 and 1[illegible]

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

1. Applicant's election without traverse of Group I (Claims 1-7) in Paper No. 10, mailed 2-28-01, is acknowledged. Upon reconsideration, Group II (Claims 8-15) has been rejoined with Group I.

2. Claims 16-42 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to a nonelected invention. Election was made **without** traverse in Paper No. 10, mailed 2-28-01.

3. Formal drawings and/or photographs have been submitted which fail to comply with 37 CFR 1.84. Please see the enclosed form PTO-948.

4. Applicant should amend the first line of the specification to update the status (and relationship) of the priority documents. The first sentence of the specification should refer to the provisional application using language such as:

This application claims the benefit of U.S. Provisional Application No. 60/097,640, filed 8/24/98. See MPEP 1302.04

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, In such full, clear, concise, and exact terms as to enable any person skilled In the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method for reducing immune mediated damage to cells, tissues or organs comprising contacting a cell, tissue or organ with an immunoprotective amount of HSP47 (SEQ ID NO:6) or a fragment thereof that consists of AVLSAEQLR (SEQ ID NO:3), or a fragment thereof that consists of Deletion Mutant #1 as described in the instant specification on page 44 as lacking the RDEL sequence, a fragment thereof that consists of Deletion Mutant #3 as described in the instant specification on page 44 as lacking the carboxyl terminal 150 amino acids, or a composition thereof, does not reasonably provide enablement for the broader recitation of reducing immune mediated damage to a cell, tissue or organ comprising contacting with any HSP47 related immunoprotective polypeptide, or with a composition comprising any HSP47 or any fragment or any variant thereof. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

. The specification disclosure is insufficient to enable one skilled in the art to practice the invention as broadly claimed in the instant claims without an undue amount of experimentation. The scope of the claims is not commensurate with the enablement provided by the disclosure with regard to the extremely large number of polypeptides broadly encompassed by the claims.

The instant specification provides enablement only for a method comprising the HSP47 polypeptide (SEQ ID NO:6), and a fragment of an HSP47 polypeptide consisting of the sequence AVLSAEQLR (SEQ ID NO:3), and compositions thereof. However the specification fails to provide guidance as to how to make or use any other HSP47-related polypeptide, or composition thereof, as recited in claim 1 and dependent claims 6-7, or a composition comprising any HSP47 polypeptide, as recited in claim 8 and dependent claims 14-15. Because said claims recite no structural basis for the recited polypeptides, it is therefore not clear whether said polypeptides (other than the HSP47 polypeptide (SEQ ID NO:6), and a fragment of an HSP47 polypeptide (SEQ ID NO:6) consisting of the sequence AVLSAEQLR (SEQ ID NO:3) or Deletion mutant #1 or Deletion mutant #3) would be effective in in the claimed method of reducing immune-mediated damage.

Furthermore, the specification fails to provide guidance as to how to make or use a composition comprising any immunoprotecting variant or fragment of the polypeptide comprising the amino acid sequence of SEQ ID NO:6 as recited by claims 9 and 13, (other than an HSP47 polypeptide fragment consisting of the sequence AVLSAEQLR (SEQ ID NO:3) or Deletion mutant #1 or Deletion mutant #3), or comprising any polypeptide comprising an amino acid sequence having at least about 70% amino acid sequence identity with SEQ ID NO:6, or a fragment thereof or variant thereof as further recited in claim 9, or comprising any polypeptide comprising an amino acid sequence encoded by a nucleic acid that hybridizes to a nucleic acid (SEQ ID NO:5), or a fragment thereof or variant thereof, as further recited by claim 13. Furthermore, the specification fails to provide guidance as to how to make or use a polypeptide comprising SEQ ID NO:29, as recited in claim 3, wherein said polypeptide comprises a nonamer wherein the second, third and fourth residues of said nonamer can be any amino acid (SEQ ID NO:29), including naturally occurring amino acids, as well as modifications thereof, and also non naturally occurring amino acids. Predictability of which changes can be tolerated in a polypeptide's amino acid sequence and still retain similar functions and properties requires a knowledge of, and guidance with regard to which amino acids in the sequence, if any, are tolerant of modification and which are conserved or less tolerant to modification, and detailed knowledge of the ways in which the product's structure relates to its functional usefulness, as evidenced by the teachings of Abaza et al (J. Of Protein Chemistry, 11(5):433-444, 1992). Abaza et al teach that even a single amino acid difference in an antigen may effect antibody binding by teaching that an amino acid substitution of myoglobin outside the epitope recognized by a monoclonal antibody causes the myoglobin to be unreactive with said antibody,

(see entire article, especially the Abstract). Therefore, predicting which polypeptides, fragments, variations and modifications of HSP47, and compositions thereof, and which HSP47 related polypeptides, as recited in the instant claims will retain the desired immunoprotective characteristics and therefore will be useful in a method for reducing immune mediated damage is complex and well outside the realm of routine experimentation. In re Fisher, 166 USPQ 18 indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute.

Furthermore, the specification fails to provide guidance as to how to make or use a polypeptide that comprises SEQ ID NO:1, 29, 2, 3, as recited in claims 2-5, respectively, nor a composition that comprises a polypeptide that comprises an amino acid sequence having at least about 70% amino acid sequence identity with SEQ ID NO:6, or variant or fragment thereof, as recited in claims 9-10 and 12, nor a composition that comprises a polypeptide comprising an amino acid sequence encoded by a nucleic acid that hybridizes to a nucleic acid (SEQ ID NO:5), or variant or fragment thereof, as recited in claim 13. However, by reciting the term "comprises" in the instant claims, said polypeptide can also encompass an indeterminate number and type of additional amino acids, in addition to the amino acids in the recited SEQ ID NO:s. Given the indefiniteness of the additional amino acids that may be encompassed in the polypeptide of the instant claims, and given that the unpredictability of which changes (including additions) can be tolerated in a polypeptide's amino acid sequence and still retain similar functions and properties requires a knowledge of, and guidance with regard to which amino acids, if any, can be added, and detailed knowledge of the ways in which the product's structure relates to its functional usefulness, especially in view of the teachings of Seebach et al (Nat Immun 15:168-208 (1997)). Seebach et al teaches that the expression of HLA-A2 molecules on pig target endothelial cells did not provide protection from lysis by any of the NK clones tested (see first paragraph), unlike the claimed invention. It is noted that the instant specification discloses on page 30 that HSP47 (SEQ ID NO:6) as well as an immunoprotective domain of HSP47 (SEQ ID NO:6) contains a relatively small peptide domain (SEQ ID NO:3) which is by itself capable and sufficient to reduce immune mediated damage to cells. The nonamer of SEQ ID NO:3 is derived from the HLA-A consensus sequence (see pg 7 of the instant specification) and appears to display different activity depending whether it is present in an HSP47 polypeptide as disclosed by the instant specification, or in an HLA molecule as taught by Seebach et al.

Furthermore, the specification fails to provide guidance as to how to make or use a polypeptide that comprises SEQ ID NO:1 or 2, as recited in claims 2 and 4, respectively, nor a composition that comprises a polypeptide that comprises a conserved variant of SEQ ID NO:3 as recited in claim 11, or is SEQ ID NO:7 as recited in claim 12. The polypeptides encompassed by said claims all contain conserved amino acid substitutions, and examples of said conserved amino acid substitutions are disclosed in Table 1 of the instant specification. MHC restricted class I molecules

which bind a wide range of peptide antigens would tolerate the conserved substitutions recited in the instant claims and in Table I, (see Figure 4.7 of Immunobiology 4th Edition by Janeway (1999)). However, is noted that the instant specification discloses on page 30, lines 6-12, that an immunoprotective domain of HSP47 contains a relatively small peptide domain (SEQ ID NO:3) which is by itself capable and sufficient to account for the protection of Endothelial Cells from non-MHC restricted killing. The next paragraph of the instant specification then postulates that HSP47 and the deduced peptide (SEQ ID NO:3) mediate protection of EC through a non-kill signal according to the paradigm of MHC I and the "missing self hypothesis" as has been described for killer inhibitory (KIR) pathways through a yet to be identified counterreceptor.

Since no counterreceptor for the Hsp47 related polypeptide is identified in the instant specification, and due to the lack of any working examples of substitutions of one or more of the residues in SEQ ID NO:3 used in the recited method, it is not clear that applicant is enabled for the recited method of immunoprotection comprising an HSP47-related polypeptide of SEQ ID NO:1, SEQ ID NO:7 or SEQ ID NO:2, all of which contain conservative amino acid substitutions of one or more of the residues in SEQ ID NO:3. Unlike MHC restricted class I molecules which bind a wide range of peptide antigens and which would tolerate the conserved substitutions recited in the instant claims (encompassed by the A to V substitution in position 2 of SEQ ID NO:1, SEQ ID NO:7 or SEQ ID NO:2, relative to SEQ ID NO:3), non-classically MHC restricted antigens tend to be more limited, and even conservative substitution of residues in the peptidic antigen can have drastic results as evidenced by the teachings of Aldrich et al. Aldrich et al teach that substitution of valine for alanine in position 3 of the peptide antigen AMAPRTLLL associated with the non-classical MHC molecule Qa-1 has drastic effects and requires about 4 logs more peptide for target cell recognition, which has physiological consequences as demonstrated by the inability of CTLs specific for Qa-1/AMAPRTLLL to recognize Qa-1b on cells that contain the peptide AMVPRTLLL as well as their diminished recognition of cells pulsed with AMVPRTLLL (see entire article, including abstract and Figure 3D and the last two sentences of the second paragraph of the Discussion Section on page 654).

Since that instant specification discloses that SEQ ID NO:3 reduces immune mediated damage of EC from non-MHC restricted killing, but discloses no specific receptor capable of presenting or recognizing the peptide of SEQ ID NO:3, and given the nonequivalency of a conservative substitution of A to V in a peptide associated with a molecule (Qa-1) which displays non-MHC restricted killing, as taught by Aldrich et al., and given that Lo et al (Nature Medicine 6(2):215-218 (2000)) teach that Qa-1 when associated with class I leader sequence derived peptides such as AMAPRTLLL serves as a ligand for the CD94-NKG2A receptor complex essential to natural killer cell recognition of class-I deficient target cells (as disclosed by the instant specification (see supra)) and given that Lo et al also teaches that Qa-1 presents a peptide derived from mouse heat shock protein 60, (see entire article, including page 217, column 1, 2nd full

paragraph and Abstract), it would appear that the instant specification provides insufficient guidance and direction for the efficacy of the recited polypeptides containing conservative substitutions, absence evidence to the contrary.

In view of the quantity of experimentation necessary, the limited working examples, the unpredictability of the art, the lack of sufficient guidance in the specification and the breadth of the claims, it would take undue trials and errors to practice the claimed invention and this is not sanctioned by the statute.

7. Claims 1-15are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 6-7 recite a method comprising contacting a cell, tissue or organ with "an Hsp47-related immunoprotective polypeptide", which applicant has described on page 6, lines 30-32 of the instant specification as any polypeptide which has immunoprotecting properties which are similar either qualitatively or quantitatively to that of the HSP47 polypeptide of the instant application.

Claims 8 and 14-15 recite a method comprising contacting a cell, tissue or organ with "a composition comprising Hsp47 polypeptide", which applicant has described in the instant specification on page 8, lines 18-20, as including HSP47 polypeptides and immunoprotecting fragments and variants thereof from all vertabrates.

The instant disclosure of "an Hsp47-related immunoprotective polypeptide" and "a composition comprising Hsp47 polypeptide" does not adequately describe the scope of each claimed genus, each of which encompasses a substantial variety of subgenera. With the exception of the amino acid sequence of human HSP47 (SEQ ID NO:6), there is no description of the required structural and specific immunoprotective functional features of said polypeptides, or of the conserved regions that would be critical for these features. Further, the prior art does not provide compensatory structural or correlative teachings to enable one of skill to identify the polypeptides encompassed, with the exception of counterparts to human HSP47 from chicken and rat, as disclosed in the instant specification on page 8, lines 18-19. Therefore, the structure of "an Hsp47-related immunoprotective polypeptide" and "a composition comprising Hsp47 polypeptide" is not conventional in the art and one of skill in the art would not recognize from the disclosure that applicant was in possession of the genus "An Hsp47-related immunoprotective polypeptide" and "a composition comprising Hsp47 polypeptide" encompassed by the method of the claimed invention.

It is noted that though the claimed invention is directed to polypeptides and not cDNA, the principle of the following still holds for said polypeptides: a description of a

genus of cDNAs may be achieved by means of a recitation of a representative number of cDNAs, defined by nucleotide sequence, falling within the scope of the genus, or of a recitation of structural features common to the genus, which features constitute a substantial portion of the genus. *Regents of the University of California v. Eli Lilly&Co.*, 119F3d 1559, 1569, 43 USPQ2d 1398, 1406 (Fed. Cir. 1997).

Claim 3 recites a method comprising contacting a cell, tissue or organ with an Hsp47-related immunoprotective polypeptide, wherein said polypeptide comprises a nonomer wherein the second, third and fourth residues of said nonamer can be any amino acid (SEQ ID NO:29). However, the structure of said polypeptide is not adequately described for two reasons. First, only a partial structure is recited since only positions #1 and #5-9 of said nonomer are described as being specific amino acids, while positions #2-4 of said nonamer can be any amino acid, including naturally occurring amino acids, as well as modifications thereof, and also non naturally occurring amino acids. Second, since the polypeptide comprises a nonamer, said polypeptide can also encompass an indeterminate number and type of additional amino acids, in addition to the recited nonamer. Since only a partial structure of the nonamer component of said Hsp47-related immunoprotective polypeptide is recited, and since an indefinite number and type of additional amino acids may also be encompassed by the recited polypeptide, the method of claim 3 is not adequately described, especially given that the prior art does not provide compensatory structural or correlative teachings to enable one of skill to identify a polypeptide encompassed by the method recited in claim 3, along the lines of reasoning discussed in the previous three paragraphs.

Claims 2 and 4-5 recite a method comprising contacting a cell, tissue or organ with an Hsp47-related immunoprotective polypeptide, wherein said polypeptide comprises a nonomer of SEQ ID NO: 1, 2 or 3, respectively, wherein the recited structure of said nonamer is described in the instant claims. Similarly, Claims 9, 10, 12 and 13 recite a method comprising contacting a cell, tissue or organ with a composition that comprises Hsp47 polypeptide, wherein the recited structure of said polypeptide is described as either SEQ ID NO:6 or SEQ ID NO:3 or SEQ ID NO:7. However, by reciting the term "comprises" in the instant claims, said polypeptide can also encompass an indeterminate number and type of additional amino acids, in addition to the amino acids in the recited SEQ ID NO:s. Given the indefiniteness of the additional amino acids that may be encompassed in the polypeptide of the instant claims, the method of claims 2, 4-5, 9-10 and 12-13 are not adequately described, given that the prior art does not provide compensatory structural or correlative teachings to enable one of skill to identify a polypeptide encompassed by the method recited in said claims along the lines of reasoning discussed in the previous paragraphs.

Claim 9B recites a method encompassing a polypeptide comprising an amino acid sequence having at least about 70% amino acid sequence identity with SEQ ID

NO:6. However, by reciting the phrase "about 70% amino acid sequence identity" in the instant claims, said polypeptide can also encompass an indeterminate number and combination of amino acid substitutions in SEQ ID NO:6 comprising an indefinite mixture of amino acid types being substituted at an indefinite amino acid positions along the length of SEQ ID NO:6. Since the applicants have not disclosed a method encompassing a polypeptide comprising a disclosed amino acid sequence having at least about 70% amino acid sequence identity with SEQ ID NO:6, other than SEQ ID NO:6 itself, the invention encompassing said method is not adequately described along the lines of reasoning discussed in the previous paragraphs.

Claim 13B recites a method encompassing a polypeptide comprising an amino acid sequence encoded by a nucleic acid that hybridizes to a nucleic acid (SEQ ID NO:5). However, by reciting hybridization terminology in the instant claims, said polypeptide can also encompass an indeterminate number and combination of amino acid substitutions in SEQ ID NO:6 encoded by an indefinite number of nucleic acid molecules capable of hybridizing under any hybridization conditions, (including low stringency), to a nucleic acid of SEQ ID NO:5. However, since the applicants have not disclosed a method encompassing a polypeptide encoded by a disclosed nucleic acid molecule which hybridizes to a nucleic acid acid of SEQ ID NO:5, the invention encompassing said method is not adequately described along the lines of reasoning discussed in the previous paragraphs.

Claims 9C and 13C recite a method encompassing an immunoprotecting fragment of the polypeptide comprising the amino acid sequence of human Hsp47 (SEQ ID NO:6). Claim 9C further recites a method encompassing an immunoprotecting fragment of a polypeptide comprising an amino acid sequence having at least about 70% amino acid sequence identity with SEQ ID NO:6, while claim 13C further recites a method encompassing an immunoprotecting fragment of the polypeptide encoded by the nucleic acid that hybridizes to a nucleic acid of SEQ ID NO:5. Given that each of the latter two polypeptides itself is not adequately described, (see previous two paragraphs) , it follows that an immunoprotecting fragment of said two polypeptides is also not adequately described. Further, since applicants have not disclosed a fragment of the polypeptide comprising the amino acid sequence of SEQ ID NO:6, other than AVLSAEQLR (SEQ ID NO:3), and given that the prior art does not provide compensatory structural or correlative teachings to enable one of skill to identify a polypeptide encompassed by the method recited in said claims, the invention encompassing said method is also not adequately described, along the lines of reasoning discussed supra.

Claims 9D and 13D recite a method encompassing an immunoprotecting variant of the polypeptide comprising the amino acid sequence of human Hsp47 (SEQ ID NO:6), while Claim 11 recites a method encompassing an immunoprotecting variant of the polypeptide comprising the amino acid sequence of the sequence AVLSAEQLR

(SEQ ID NO:3). Claim 9D further recites a method encompassing an immunoprotecting variant of a polypeptide comprising an amino acid sequence having at least about 70% amino acid sequence identity with SEQ ID NO:6, while Claim 13D further recites a method encompassing an immunoprotecting variant of the polypeptide encoded by the nucleic acid that hybridizes to a nucleic acid of SEQ ID NO:5. Given that each of the latter two polypeptides itself is not adequately described, (see previous three paragraphs), it follows that an immunoprotecting variant of each of said two polypeptides is also not adequately described. Further, since applicants have not disclosed a variant of the polypeptide comprising the amino acid sequence of SEQ ID NO:6, other AAHVAEQLR (SEQ ID NO:7), nor an immunoprotecting variant of the polypeptide comprising the amino acid sequence of the sequence AVLSAEQLR (SEQ ID NO:3), other than AAHVAEQLR (SEQ ID NO:7), and given that the prior art does not provide compensatory structural or correlative teachings to enable one of skill to identify a polypeptide encompassed by the method recited in said claims, the invention encompassing said method is also not adequately described, along the lines of reasoning discussed supra. Despite knowledge in the art for producing variants, the specification fails to provide guidance regarding what deletions, additions, substitutions or alterations in the disclosed sequences result in polypeptide variants with the recited immunoprotective properties.

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention.* The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed.*" (See page 1117.)

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the Applicant regards as his invention.

9. Claim 6 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Claim 6 is indefinite because there is no verb. One way to overcome this rejection is by inserting the word "is" after the word "damage" in the first line of claim 6. It is also suggested to insert a hyphen after the first "e" in the word "immunemediated" in the first line of claim 6.

B) Claim 13 is indefinite in the recitation of "hybridizes". The term is defined in the specification on page 11, in terms of "stringent" and "moderately stringent" hybridization conditions, and it is therefore unclear under which conditions the Applicants intend the claimed polynucleotide sequences to hybridize. This rejection

could be overcome by listing specific hybridization conditions disclosed on page 11, into the claim.

10. The disclosure is objected to because of the following minor informalities: The word "abiligy" on page 55, line 28 of the instant specification appears to be misspelled. Perhaps "ability" was intended.

11. The specification is objected to because incorporation of subject matter into the patent application by reference to a hyperlink and/or other forms of browser-executable code is considered to be an improper incorporation by reference. See MPEP 608.01(p), paragraph I regarding incorporation by reference. Therefore the embedded hyperlinks and/or other forms of browser-executable code disclosed on page 10 of the instant specification are impermissible and require deletion. Where the hyperlinks and/or other forms of browser-executable codes are part of applicant's invention and are necessary to be included in the patent application in order to comply with the requirements of 35 U.S.C. 112, first paragraph, and applicant does not intend to have these hyperlinks be active links, then this objection will be withdrawn and the Office will disable these hyperlinks when preparing the patent text to be loaded onto the PTO web database.

12. No claim is allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy DeCloux whose telephone number is (703) 306-5821. The examiner can normally be reached Monday through Friday from 9:00 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Amy DeCloux, Ph.D.
Patent Examiner,
July 16, 2001

Christina Chan

CHRISTINA Y. CHAN
SUPERVISORY PATENT EXAMINER
GROUP ~~1800~~ 1640